

In the Claims

Claims 1-7 and 9-11 are pending in the application. No amendment has been made to the claims.

1. (Previously presented) A method of preparing a catalyst for polymerization of aliphatic polycarbonates, comprising:

(i) mixing 1 to 20 parts by weight of a templating agent with 100 parts by weight of a solvent to form a solution;

(ii) mixing 1 to 20 parts by weight of a zinc precursor with the solution;

(iii) mixing 1 to 10 parts by weight of an organic dicarboxylic acid with the solution to form a precipitated material; and

(iv) separating the templating agent from the precipitated material to form a catalyst.

2. (Original) The method of claim 1, wherein the templating agent is a non-ionic surfactant.

3. (Original) The method of claim 1, wherein the templating agent is an amphiphilic block copolymer.

4. (Previously presented) The method of claim 3, wherein the amphiphilic block copolymer is a diblock copolymer, in which a block in the diblock is different from each other.

5. (Original) The method of claim 3, wherein the amphiphilic block copolymer is an A-B-A type triblock copolymer or a B-A-B type triblock copolymer.

6. (Original) The method of claim 1, wherein the templating agent is selected from the group consisting of polyoxyethylene-polyoxypropylene-polyoxyethylene, polyoxyethylene-polyoxypropylene, polyoxypropylene-polyoxyethylene-polyoxypropylene, polystyrene-polyoxyethylene, polystyrene-poly-2-vinylpyridine, polystyrene-poly-4-vinylpyridine, polyethylene-polyoxyethylene, polyethylenepropylene-polyoxyethylene, polymethylmethacrylate-polyoxyethylene, polystyrene-polymethylmethacrylate, polystyrene-polybutadiene, polystyrene-polybutadiene-polystyrene, polystyrene-polyisoprene, polystyrene-polyisoprene-polystyrene, polyN-vinylpyrrolidone-polystyrene, poly(dimethylamino)ethylmethacrylate-methacrylate, poly(2-dimethylamino)ethylmethacrylate-polybutylmethacrylate, polystyrene-poly-2-hydroxyethylmethacrylate, polyisobutylene-polymethylvinylether, polystyrene-polyhydroxyethylvinylether, polystyrene-polyionicacetylene, polymethyl-3-(methyleneglycol)vinylether-polyisobutylvinylether, poly(2-(1-pyrrolidonyl)ethylvinylether-polyisobutylvinylether, and polylauryllactam-polytetrahydrofuran.

7. (Original) The method of claim 6, wherein the templating agent is selected from the group consisting of polyoxyethylene-polyoxypropylene-polyoxyethylene, polyoxyethylene-polyoxypropylene, polyoxypropylene-polyoxyethylene-polyoxypropylene, polystyrene-polyoxyethylene, polystyrene-poly-2-vinylpyridine, polystyrene-poly-4-vinylpyridine, polyethylene-polyoxyethylene, polyethylenepropylene-polyoxyethylene, polymethylmethacrylate-polyoxyethylene, polystyrene-polymethylmethacrylate, polystyrene-polybutadiene, polystyrene-polybutadiene-polystyrene, polystyrene-polyisoprene, and polystyrene-polyisoprene-polystyrene.

8. (Canceled)

9. (Original) The method of claim 1, wherein the zinc precursor is selected from the group consisting of anhydrous zinc acetate, zinc hydroxide, zinc chloride, zinc nitrite, zinc perchlorate hexahydrate, zinc oxide, zinc sulfate, zinc acetate dihydrate, and zinc nitrate hexahydrate.

10. (Previously presented) The method of claim 1, wherein the organic dicarboxylic acid is aliphatic dicarboxylic acid or aromatic dicarboxylic acid.

11. (Currently amended) A method of polymerizing an aliphatic polycarbonate, comprising:

- (i) mixing 1 to 20 parts by weight of a templating agent with 100 parts by weight of a solvent to form a solution;
- (ii) mixing 1 to 20 parts by weight of a zinc precursor with the solution;
- (iii) mixing 1 to 10 parts by weight of an organic dicarboxylic acid with the solution to form a precipitated material;
- (iv) separating the templating agent from the precipitated material to form a catalyst; and
- (v) copolymerizing alkylene oxide and carbon dioxide in the presence of a catalyst.